

CLAIMS

1. A computer-implemented method for adjusting a reference selling profile for a reference product, comprising:

5 retrieving one or more reference selling profiles corresponding to daily or more frequent historical data for one or more reference products; and

adjusting the reference selling profiles to correct for one or more promotions which impacted the historical data.

10 2. The method of claim 1, further including storing one or more adjusted selling profiles.

15 3. The method of claim 1, wherein the promotions include advertising of the reference products.

20 4. The method of claim 1, wherein the promotions include a preferential display of the reference products.

5. The method of claim 1, wherein the promotions include a reduced price for the reference products.

6. The method of claim 1, further including adjusting the reference selling profiles to correct for seasonal selling effects which impacted the historical data.

5 7. The method of claim 6, wherein the adjusting to correct for seasonal selling effects step includes ratioing the reference selling profiles with a general profile comprising historical data for non-promoted products.

10 8. The method of claim 7, wherein the non-promoted products are non-seasonal or basic products.

15 9. The method of claim 7, wherein the non-promoted products are seasonal products.

10 10. The method of claim 1, further including adjusting the reference selling profiles to correct for special selling days which impacted the historical data.

15 11. The method of claim 10, wherein the special selling days include one or more days preceding Valentines Day, Mothers Day, Memorial Day, the Fourth of July, Labor Day, Thanksgiving or Christmas.

20 12. The method of claim 10, wherein the special selling days include one or more days following Thanksgiving or Christmas.

25 13. The method of claim 10, wherein the special selling days include back to school days.

14. The method of claim 1, further including adjusting the reference selling profiles to correct for

15. The method of claim 1, wherein the reference selling profiles include daily or
5 more frequent historical data for locations.

16. The method of claim 1, wherein the daily or more frequent historical sales data includes a stock on hand indicator for locations, further including adjusting the historical data to correct for stock out conditions at the locations.

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17. The method of claim 16, wherein the adjusting to correct for stock out conditions includes evaluating the historical sales data and the stock on hand indicators for the locations and correcting for lack of sales attributable to failure to display stock on hand.

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18. The method of claim 16, wherein the adjusting to correct for stock out conditions includes evaluating the historical sales data and the stock on hand indicators for the locations and filling in sales for days preceding first dates of sales for the locations.

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19. The method of claim 16, wherein the adjusting to correct for stock out conditions includes evaluating the historical sales data and the stock on hand indicators for the locations and correcting for outlying sales at the locations attributable to false indications of stock on hand.

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20. The method of claim 16, wherein the adjusting to correct for stock out conditions includes evaluating the historical sales data and the stock on hand indicators for the locations and filling in sales for days following final dates of sales, after excluding outlying sales at the locations.

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21. The method of claim 3, wherein the daily or more frequent historical data includes a stock on hand indicator for locations, further including adjusting the historical data to correct for stock out conditions at the locations.

10 22. The method of claim 4, wherein the daily or more frequent historical data includes a stock on hand indicator for locations, further including adjusting the historical data to correct for stock out conditions at the locations.

15 23. The method of claim 5, wherein the daily or more frequent historical data includes a stock on hand indicator for locations, further including adjusting the reference selling profiles to correct for stock out conditions at the locations.

20 24. The method of claim 1, wherein casual factors historical data is linked to the reference selling profiles and retrievable for use in one or more adjusting steps.

25. A computer-implemented method for adjusting a reference selling profile for a reference product, comprising:

retrieving one or more reference selling profiles corresponding to daily or more

frequent historical data for one or more reference products;

wherein the historical data includes a stock on hand indicator for locations,
adjusting the reference selling profiles to correct for out of stock conditions at the
5 locations.

26. The method of claim 25, wherein the adjusting to correct for stock out conditions
includes evaluating the historical sales data and the stock on hand indicators for
the locations and correcting for lack of sales attributable to failure to display stock
10 on hand.

27. The method of claim 25, wherein the adjusting to correct for stock out conditions
includes evaluating the historical sales data and the stock on hand indicators for
the locations and filling in sales for days preceding first dates of sales for the
15 locations.

28. The method of claim 25, wherein the adjusting to correct for stock out conditions
includes evaluating the historical sales data and the stock on hand indicators for
the locations and correcting for outlying sales at the locations attributable to false
20 indications of stock on hand.

29. The method of claim 25, wherein the adjusting to correct for stock out conditions
includes evaluating the historical sales data and the stock on hand indicators for
the locations and filling in sales for days following final dates of sales, after
25 excluding outlying sales at the locations.

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30. The method of claim 25, wherein the out of stock conditions are corrected using average sales levels.

31. The method of claim 25, wherein the out of stock conditions are corrected using 5 profiled sales levels.

32. The method of claim 25, wherein a selection among types of out of stock corrections requires no user selection.

10 33. The method of claim 25, wherein a selection among types of out of stock corrections is made by a user.

15 34. A computer-implemented method for setting location distribution shares, comprising:

retrieving daily or more frequent historical data for locations for one or more reference products;

adjusting the historical data to correct for out of stock conditions at the locations; 20 and

calculating location shares based on the corrected historical data.

35. The method of claim 34, wherein the adjusting to correct for stock out conditions 25 includes evaluating the historical sales data and the stock on hand indicators for

the locations and correcting for lack of sales attributable to failure to display stock on hand.

36. The method of claim 34, wherein the adjusting to correct for stock out conditions

5 includes evaluating the historical sales data and the stock on hand indicators for the locations and filling in sales for days preceding first dates of sales for the locations.

37. The method of claim 34, wherein the adjusting to correct for stock out conditions

10 includes evaluating the historical sales data and the stock on hand indicators for the locations and correcting for outlying sales at the locations attributable to false indications of stock on hand.

38. The method of claim 34, wherein the adjusting to correct for stock out conditions

15 includes evaluating the historical sales data and the stock on hand indicators for the locations and filling in sales for days following final dates of sales, after excluding outlying sales at the locations.

39. The method of claim 34, wherein the out of stock conditions are corrected using

20 average sales levels.

40. The method of claim 34, wherein the out of stock conditions are corrected using

profiled sales levels.

41. The method of claim 34, wherein a selection among types of out of stock corrections requires no user selection.

42. The method of claim 34, wherein a selection among types of out of stock corrections is made by a user.

43. The method of claim 34, wherein calculating location shares further includes grouping products into groups sufficiently large to overcome random selling noise.

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44. A computer-implemented method for setting location distribution shares, comprising:

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retrieving daily or more frequent historical data for locations for one or more reference products;

adjusting the historical data to correct for causal events at the locations; and

calculating location shares based on the corrected historical data.

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45. The method of claim 44, wherein the causal events include advertising of the reference products.

46. The method of claim 44, wherein the causal events include a preferential display of the reference products.

47. The method of claim 44, wherein the causal events include a reduced price for the
5 reference products.

48. The method of claim 44, wherein the causal events include one or more special selling days.

10 49. The method of claim 48, wherein the special selling include one or more days preceding Valentines Day, Mothers Day, Memorial Day, the Fourth of July, Labor Day, Thanksgiving or Christmas.

15 50. The method of claim 48, wherein the special selling days include one or more days following Thanksgiving or Christmas.

51. The method of claim 44, wherein the adjusting step further includes ratioing the reference selling profiles with a general selling profile comprising historical data for non-promoted products.

20 52. The method of claim 51, wherein the non-promoted products include non-seasonal products.

53. The method of claim 51, wherein the non-promoted products include seasonal products.

54. The method of claim 44, further including adjusting to correct for stock out conditions by evaluating the historical sales data and the stock on hand indicators for the locations and correcting for lack of sales attributable to failure to display stock on hand.

55. The method of claim 44, further including adjusting to correct for stock out conditions by evaluating the historical sales data and the stock on hand indicators for the locations and filling in sales for days preceding first dates of sales for the locations.

56. The method of claim 44, further including adjusting to correct for stock out conditions by evaluating the historical sales data and the stock on hand indicators for the locations and correcting for outlying sales at the locations attributable to false indications of stock on hand.

57. The method of claim 44, further including adjusting to correct for stock out conditions by evaluating the historical sales data and the stock on hand indicators for the locations and filling in sales for days following final dates of sales, after excluding outlying sales at the locations.

58. The method of claim 44, wherein the causal events at the locations comprise promotions, by location, of the reference product, further including adjusting the

historical data to correct for stock out conditions

59. A computer-implemented method for setting location distribution shares, comprising:

5 retrieving daily or more frequent historical data for locations for a plurality of reference products;

10 adjusting the historical data to correct for product assortment variations among the respective locations; and

calculating location shares based on the corrected historical data.

15 60. The method of claim 59, wherein the adjusting step further includes correcting for product assortment variations based on unit sales quantities.

61. The method of claim 59, wherein the adjusting step further includes correcting for product assortment variations based on dollar sales quantities.

20 62. The method of claim 59, wherein the adjusting step further includes correcting for product assortment variations based on percentage sales quantities.

63. The method of claim 59, further including storing one or more adjusted selling profiles.

64. The method of claim 59, wherein the plurality of reference products includes a number of products sufficiently large to overcome random selling noise.

65. A computer-implemented method for generating a projected sales profile for a particular product, comprising:

accessing one or more adjusted or unadjusted reference selling profiles corresponding to daily or more frequent historical data for one or more reference product; and

projecting a sales profile by adjusting the reference selling profiles to reflect sales lift from one or more promotions planned for a particular product.

66. The method of claim 65, further including storing one or more projected sales profiles for the particular product.

67. The method of claim 65, wherein the particular product has a time period for sales, further including truncating the reference selling profiles to a matching time period the same length as the time period for sales.

68. The method of claim 67, further including scaling historical data for the truncated reference selling profiles so that the sales profile projections sum to 1.0.

69. The method of claim 65, wherein the promotions have starting dates and ending dates and the starting dates and the ending dates are used in adjusting the

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reference selling profiles.

70. The method of claim 65, wherein the promotions include advertising of the particular product.

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71. The method of claim 69, wherein the promotions include advertising of the particular product.

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72. The method of claim 65, wherein the promotions include a preferred display of the particular product.

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73. The method of claim 69, wherein the promotions include a preferred display of the particular product.

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74. The method of claim 65, wherein the promotions include a reduced price for the particular product.

75. The method of claim 69, wherein the promotions include a reduced price for the particular product.

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76. A computer-implemented method of revising a plurality of location distribution shares for a particular product, taking into account planned promotions of the particular product, comprising:

accessing a plurality of projected sales profiles, by location, for a particular product;

adjusting the projected sales profiles to reflect sales lift from one or more
5 promotions planned, by location, for the particular product;

revising a plurality of location distribution shares based on the adjusted projected sales profiles.

10 77. The method of claim 76, wherein the promotions include advertising of the particular product.

78. The method of claim 76, wherein the promotions include a preferred display of the particular product.

15 79. The method of claim 76, wherein the promotions include a reduced price of the particular product.

80. A computer-implemented method of revising a plurality of location distribution
shares for a particular product, taking into account planned promotions of the
20 particular product, comprising:

accessing a plurality of projected daily or more frequent sales profiles, by location, and a plurality of location distribution shares, for a particular product;
25 and

adjusting the location distribution shares to reflect a weighted mix of the projected daily or more frequent sales profiles and an actual daily or more frequent sales.

5 81. The method of claim 80, wherein the actual daily or more frequent sales are for a group of products.

82. The method of claim 80, wherein the weighted mix is calculated using weight =
[(actual sales / projected sales) * (1 – factor)] + (factor).

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83. The method of claim 82, wherein the factor selected is between 0.0 and 1.0.

84. The method of claim 80, wherein the weighted mix is calculated proportional to an elapsed period of sales.

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85. The method of claim 80, wherein the weighted mix is calculated proportional to actual sales divided by projected sales.

86. A computer-implemented method of calculating quantities for distribution of a particular product to a plurality of locations, comprising:

projecting daily or more frequent sales of a particular product;

applying location distribution shares for a plurality of locations to the projected daily or more frequent sales; and

5 calculating distribution quantities for a first shipping date for the plurality of locations sufficient to cover the locations' respective shares of the projected daily or more frequent sales from the first shipping date to a second shipment receipt date.

87. The method of claim 86, wherein the calculating step further includes adjusting

10 the distribution quantities by a coverage index.

88. The method of claim 87, wherein the coverage index selected is between 1 and 3.

15 89. The method of claim 86, wherein a sum of the distribution quantities corresponds to distribution of a total buy quantity for the particular product.

90. The method of claim 86, wherein a sum of the distribution quantities corresponds to distribution of a selected quantity different from a total buy quantity for the particular product.

20 91. The method of claim 86, wherein presentation quantities are associated with at least a portion of the locations and the calculating step further includes increasing at least a portion of the distribution quantities to satisfy the presentation quantities.

25 92. The method of claim 86, wherein the particular product is shipped in case lots and the calculating step further includes adjusting the distribution quantities to match

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the case lots.

93. The method of claim 91, wherein the particular product is shipped in case lots and
the calculating step further includes adjusting the distribution quantities to match
5 the case lots.

94. The method of claim 91, wherein the presentation quantity is reduced over a
period of the projected sales.

10 95. The method of claim 86, wherein the calculating step further includes adjusting
the distribution quantities to reflect stock on hand at or prior to the first
distribution date.

15 96. The method of claim 86, wherein the location distribution shares in the applying
step are based on historical data corrected for out of stock conditions in locations.

97. The method of claim 86, wherein a quantity of stock to be distributed is less than a
sum of the distribution quantities, further including reducing the respective
distribution quantities to not exceed the quantity of stock to be distributed.
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98. A computer-implemented method of calculating quantities for distribution of a
particular product to a plurality of locations, comprising:

projecting daily or more frequent sales of a particular product from a shipping date to a close out date;

5 scaling the projected daily or more frequent sales to substantially appropriate amounts of in-location and out-of-location inventory;

applying location shares for a plurality of locations to the scaled projected daily or more frequent sales;

10 calculating distribution quantities for the plurality of locations, taking into account in-location inventory, said quantities being sufficient to distribute substantially all of the out-of-location inventory.

99. The method of claim 98, wherein the projecting step takes into account sales lift
15 due to ongoing promotions extending beyond the shipping date.

100. The method of claim 98, wherein the projecting step takes into account sales lift due to promotions beginning between the shipping date and the close out date.

20 101. The method of claim 98, further including taking into account one or more locations which have more in-location inventory than their projected daily or more frequent sales through the close out date.

25 102. The method of claim 99, further including taking into account one or more locations which have more in-location inventory than their projected daily or more

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frequent sales through the close out date.

103. The method of claim 100, further including taking into account one or more locations which have more in-location inventory than their projected daily or more frequent sales through the close out date.

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104. A computer-implemented method for selecting markdowns for a product, comprising:

10 projecting daily or more frequent sales of a product through a close out date;

selecting a plurality of combinations of mark down dates and mark down percentages; and

15 projecting sales lifts and effectiveness of the plurality of combinations.

105. The method of claim 104, wherein the projecting sales lifts step further includes calculating out of stock dates of the plurality of combinations.

20 106. The method of claim 104, wherein the projecting daily or more frequent sales step further includes correcting for out of stock conditions impacting data from which the projections are made.

107. The method of claim 104, wherein the projecting daily or more frequent sales 25 step further includes correcting for promotions impacting data from which the

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projections are made.

108. The method of claim 104, wherein a user selects one or more mark down dates
and one or more mark down percentages and the plurality of combinations are
5 generated automatically.

109. The method of claim 104, wherein a user selects the plurality of combinations.

110. The method of claim 104, wherein a user selects the plurality of combinations
10 from a predetermined set of combinations.

111. The method of claim 104, wherein the projecting step includes applying one or
more predetermined rules to eliminate one or more of the plurality of
combinations from consideration.
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